Walla Walla Watershed - WRIA 32

Stream flows are limiting to salmonid production in most of the tributaries of the Walla Walla Basin including the mainstem due primarily to irrigation diversions. Summer steelhead access and rearing habitat is primarily limited by low flows, although "push-up" diversion dams exist throughout the watershed, which result in passage barriers during spring migration.

While the stream flow prioritization matrix weights small streams more favorably for restoration due to reduced instream flow needs to achieve target flows, it is recognized that fish access must be provided through mainstem reaches downstream for successful salmon recovery.

While acquisition of senior water rights in the lower reaches of the Walla Walla River would be of highest priority, seasonal acquisition of junior water right during fall and spring months to extend passage times for adult steelhead would also be valuable. Alternatively, senior water rights acquired low in the basin would require junior holders to release flows downstream during drought or late summer conditions, though not from specific upstream reaches.

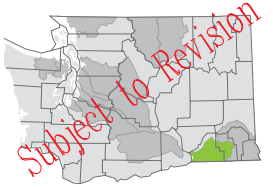
One of the primary reasons for the relatively low rankings of many of the streams in the Walla Walla River Basin is the poor condition of existing habitat. However, habitat conditions are relatively good in the headwaters of the Mill Creek and Touchet River watersheds including their tributaries (Coppei Creek, North and South Forks Touchet, and Blue Creek), which are located within relatively remote forested zones. Thus, providing access to this relatively intact habitat should be a high priority.

Tributaries in the lower Walla Walla basin also have potential for salmonid and stream flow restoration but will also require habitat restoration efforts as well. Yellowhawk Creek, which is actually a braid of Mill Creek, is relatively unique in that it functions as the primary channel for summer flow below Bennington Dam during the summer months when water is diverted from Mill Creek. Due to the poor passage and habitat conditions in Mill Creek below Bennington Dam, one alternative suggests that Yellowhawk Creek should permanently serve as the primary channel for fish passage and fish should be screened out of lower Mill Creek. If so, flow, passage, and habitat restoration should be focused on Yellowhawk Creek, while lower Mill Creek would be used as a high flow or flood control channel.

Dry Creek, Cottonwood Creek, and perhaps the Little Walla Walla River, Pine Creek, and Mud Creek currently support remnant populations of summer steelhead and have recovery potential. However, portions of Pine Creek, Little Walla Walla River, and Cottonwood Creek extend into Oregon and the success of flow restoration efforts is somewhat dependent on collaboration with the State of Oregon. In addition, habitat conditions of tributaries located in areas of intensive agricultural use generally have poor habitat conditions. Expected future habitat conditions in these tributaries of the lower Walla Walla Basin should be a determining factor in the final prioritization process. The Little Walla Walla River and its associated braids are actually distributaries of the Walla Walla River and a fish screen prevents juvenile access from the upstream end. However, both adults and juveniles do migrate into this system from the lower end. Multiple springs arise from groundwater in Washington thought to be due to groundwater surcharge from irrigation in Oregon. There is some question regarding connectivity between

these springs and conservation efforts occurring in this tributary. Water right acquisitions in this area should be carefully evaluated to ensure that instream flows will be preserved if acquired.

Stream Flow Prioritization: Walla Walla WRIA 32



- US Forest Service
- US Wildlife Refuge
- US Parks/Recreation
- USFS Wilderness Area
- Bureau of Land Management
- US Dept. Defense/Energy
- Wa. Dept. of Fish & Wildlife
- Wa. Dept. of Naural Reasources
- State School/Hospital/Prison
- Wa. Parks & Recreation
- City/County Watershed/Park
- Tribal Lands
- Incorporated City

- Low priority stream
- Medium priority stream
- High priority stream
- Salmon/Bull Trout Spawning/Rearing area
- Other streams
- Canal/ditch/pipe

- USGS Stream Flow Gage
- Ecology Stream Flow Gage
- Water Right Purchase

- County
- Highway
- Local Paved Roads

WDNR/Ecology - Major Public Lands 2002 100k
WDFW/Ecology - Hydrography, 2000 100k
Ecology - WRIA, 2002 24K
WDOT - Transportation, 2001 24K
WDFW - Stream Flow Prioritization 2002
WDFW - Spawning/Rearing Areas 2002 100k
USGS/Ecology - Stream Gages 1:100k

Miles
0 4 8

Water Resources Program

WASHINGTON STATE DEPARTMENT OF ECOLOGY

GIS Technical Services
12/13/02
sfp32-mpla